

## ATTACKING CANCER IN A COMMUNITY\*

*Ninth James Ewing Memorial Lecture*

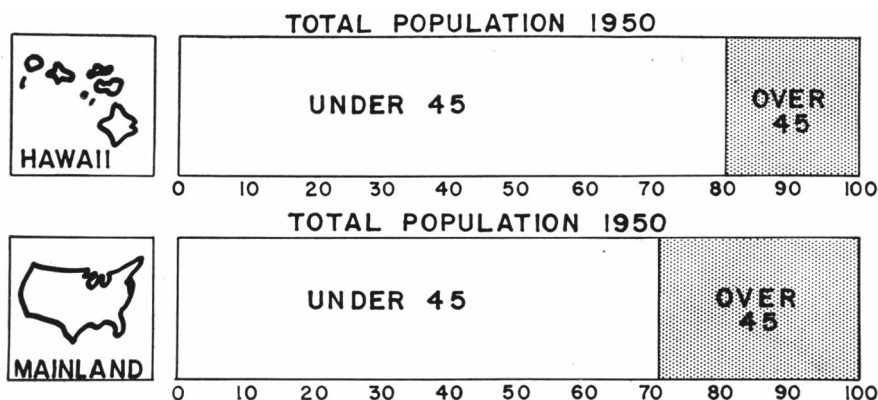
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I CANNOT remember the first time I heard the name of Dr. James Ewing, nor can I remember my first acquaintance with his work in the field of cancer. However, I do remember using his principal work, *Neoplastic Diseases*, during my medical school days, and I remember being very deeply impressed with the calibre of this book. I naturally felt greatly honored and humbled by the seriousness of the invitation to give this James Ewing Memorial Lecture. As I prepared this report, I was convinced that it was entirely in accord with Dr. Ewing's philosophy as portrayed in his writings. I am sure he had a vital interest in cancer control. This is quite evident in the preface to *Neoplastic Diseases*, the last paragraph on page 8: "While confessing a deep interest in the theoretic problems which render oncology the most complex and fascinating field in pathology, *the chief object and hope of the author have been that by rendering more accessible to English readers the knowledge of tumors, he may contribute something toward the reduction of mortality from cancer.*"

It is not necessary for me to tell you that cancer is an important community health problem in most parts of the civilized world today. This is several times more true today than it was at the time Dr. Ewing first started studying neoplastic diseases. Cancer is an important health problem in Hawaii today. In this lecture, an attempt will be made to review the advances made in cancer control in Hawaii during the past seven years. I believe it is well to consider cancer control from the standpoint of the community approach, since it affects the whole community structure. Our attack on cancer has been a joint effort of the health department, the medical society, the dental society, the cancer society, the hospitals, and many other community agencies.

\* Presented at the Stated Meeting of The New York Academy of Medicine, May 6, 1954. At the time this paper was presented, Dr. Quisenberry was Director, Division of Preventive Medicine, Territorial Department of Health, Honolulu, Hawaii.  
Manuscript received June 1954.



Graph 1—Population Distribution—Hawaii and Mainland U.S.

### TERRITORY OF HAWAII

The total population of the Territory of Hawaii is a little less than 500,000 today. In Hawaii we have had a younger population than that of the mainland United States for many years. Japanese make up approximately 37.7 per cent of the residents of Hawaii; Caucasians compose 21.4 per cent; Hawaiians and Part-Hawaiians, 17.6 per cent; Filipinos, 12.7 per cent; Chinese, 6.6 per cent; and all other racial groups, which include Puerto Ricans, Koreans, Samoans, Negroes, and others, make up 4 per cent of the total population. This makes Hawaii an ideal place to study racial differences in cancer, especially in the three largest racial groups, i.e., Japanese, Caucasians, Hawaiians and Part-Hawaiians. For many years, especially since the discovery of the islands by Captain Cook in 1778, the communicable diseases, particularly the venereal diseases and tuberculosis, were major public health problems. However, as our population has aged and the communicable diseases have been brought under control, the cancer problem has loomed larger. The distribution of Hawaii's people in the under forty-five and over forty-five age groups, as compared with the distribution for these age groups in the mainland United States in 1950, is shown in Graph 1. This picture is gradually changing as our population is aging, and also due to the fact that we are getting more older people who are moving to Hawaii in their latter years to retire.

In Table I will be found the number of deaths from cancer in Hawaii, as well as its relative position among other causes of death for

TABLE I—RELATIVE POSITION OF CANCER AS A CAUSE OF DEATH  
TERRITORY OF HAWAII, 1935-1953

<i>Year</i>	<i>No. of Deaths</i>	<i>Relative Position</i>
1935	243	7th
1936	262	6th
1937	310	4th
1938	273	4th
1939	275	3rd
1940	302	2nd
1945	359	2nd
1950	446	2nd
1953	467	2nd

the period beginning in 1935 and ending in 1953. It will be noted that not only has the number of deaths increased from 243 in 1935 when cancer was the seventh highest cause of death in Hawaii, to 467 in 1953, but it has also gone to the position of second highest cause of death, which position it attained in 1940 and it has remained there to the present, being exceeded only by heart disease.

What have we done in attacking this community health problem in Hawaii?

#### EDUCATION

Although we are aware that people are prone not to have regular physical examinations if left to their own devices, we feel that we have been able to stimulate the lay public in Hawaii through health education methods to have regular examinations by their private physicians. In this way early, incipient cancers are often discovered before they present any symptoms. The lay educational program is also intended to keep all members of the community informed of the early symptoms of cancer and they are encouraged to seek medical care at the earliest possible moment after symptoms begin. The curability of cancer when diagnosed early has been emphasized and thus an optimistic attitude has been produced. We believe we have already accomplished a considerable amount of life-saving through this means. Significant statistical evidence to show the exact amount of saving is not available as yet.

One example of an extensive lay educational approach has been our program for teaching women to examine their own breasts for lumps

every month according to the technique of Dr. Cushman Haagensen. The results of this program are not yet analyzable because of the comparative newness of the activity. We believe it should result in 80 to 90 per cent of all cancers of the breast being discovered at a time when they may be curable by present methods of treatment.

Another of our special lay educational programs is being conducted at the present time along with the mass x-ray survey program. For many years the mass x-ray survey for tuberculosis has been conducted in Hawaii. We are now expanding our educational work along with this so that just before the mass surveys are started, an educational program is started in the community to teach people that the chest x-ray taken in tuberculosis case-finding may detect evidence of cancer. Of course, our physicians who have examined the chest x-rays from the mass survey examinations for many years have looked for evidence of cancer or heart disease, but no attention has been given to these latter conditions until recently in the educational preparation for the x-ray survey. If evidence of cancer or heart disease is found on the chest x-ray, then procedures are instituted to see that the person gets further diagnostic tests and the proper treatment for his condition. We believe this method of attack on cancer of the lung should result in earlier diagnosis and thus save lives.

I believe I should say a word about professional education in Hawaii. We have found our practicing physicians quite eager to improve their professional work through education made possible by the circulation of regular bulletins, by the addition of the latest books on cancer to the medical libraries, and by lectures presented by various specialists from the mainland United States. We believe this should contribute materially to the early diagnosis and treatment of cancer and thus a reduction in deaths and bring about actual cancer prevention in Hawaii. We are grateful for the help we have received from members of The New York Academy of Medicine. As an example, I would like to mention the great contribution that Dr. George Pack made in coming to Hawaii in 1949. He gave much information and assistance in our cancer control program.

#### INVESTIGATIONS

In order to determine where the greatest emphasis should be placed in the cancer control program, several types of investigations have been

TABLE II—NUMBER OF CANCER DEATHS AND RATE PER 100,000 POPULATION BY RACE FOR TERRITORY OF HAWAII, 1941-1950

<i>Race</i>	<i>Population Average</i>	<i>Number of Deaths</i>	<i>Crude Death Rate</i>	<i>Adjusted* Death Rate</i>
All Races	462,519	3,863	83.6	141.6
Hawaiian and Part-Hawaiian	76,390	578	72.0	179.4
Caucasian	108,731	798	89.8	135.2
Chinese	31,218	335	102.1	129.1
Japanese	170,209	1,678	92.9	147.2
Filipino	57,034	244	40.9	81.5
Other**	18,937	230	115.6	141.6

\* Rates adjusted to standard million U. S. Population, 1950.  
 \*\* Includes Puerto Ricans, Koreans, other, and unknown races.

started. These might be listed as follows: 1) Mortality studies through death certificates; 2) A morbidity study through hospital records; and 3) Studies of place of death; i.e., at home, in hospitals and convalescent homes, etc., in an effort to determine the need for home care programs.

Some discussion on the first two types of investigations will be given in order to show how the data obtained may be used in attacking cancer in a community.

*Mortality Studies:* In Table II will be found the total number of cancer deaths, as well as the crude and standardized death rates, by race in Hawaii for the ten-year period, 1941 through 1950. It will be noted that this study included 3,863 deaths which occurred during the ten-year period. It should be pointed out that these data are taken from death certificates and are subject to all the errors inherent in these reports. However, the data give valid comparisons on death rates in certain groups. Since the Japanese, Caucasian, and Hawaiian and Part-Hawaiian groups are the largest in Hawaii's population, comparisons between death rates in these groups are most reliable. It will be noted that the standardized rates in all instances are higher than the crude rates. This is caused by our population being younger than the United States population average. It will be noted also that the Hawaiian and Part-Hawaiian group has a higher death rate than any other racial group. There has been considerable speculation as to why this is true. However, the most valid reason seems to be that the Hawaiian people are

TABLE III—MORTALITY RATES\* PER 100,000 POPULATION FOR CANCER OF THE STOMACH AND BREAST BY SEX AND RACE TERRITORY OF HAWAII, 1941-1950

<i>Race</i>	<i>Stomach</i>			<i>Breast</i>
	<i>Both Sexes</i>	<i>Male</i>	<i>Female</i>	<i>Female Only</i>
All Races	42.8	53.0	27.7	12.5
Hawaiian and Part-Hawaiian	44.4	52.1	36.4	31.5
Caucasian	25.7	35.4	17.2	16.7
Chinese	22.0	22.3	20.3	15.0
Japanese	57.9	73.5	33.2	3.5
Filipino	8.4	7.4	13.2	13.2
Other**	58.0	61.4	44.4	10.1

\* Rates adjusted to standard million U. S. Population, 1950.

\*\* Includes Puerto Ricans, Koreans, other, and unknown races.

reluctant to seek medical care while their cancers are in an early stage, and actually are seen at a time when a very high percentage of their cancers are incurable; whereas the opposite seems to be true in the Caucasian and Japanese groups. This shows a very great need for more cancer education directed to the Hawaiian and Part-Hawaiian groups.

In Table III will be found the cancer death rates per 100,000 population for cancer of the stomach and cancer of the breast by sex and race in Hawaii for the ten-year period, 1941 to 1950. The most significant points brought out by this table are:

1. The death rate from cancer of the stomach in Japanese for both sexes combined is higher than in all other races. It is considerably higher than that of the Hawaiian and Part-Hawaiian and more than twice as high as the Caucasian rate.

2. When we study only the male rates, Japanese men have a rate twice that of Caucasian men and one and one-half that of the Hawaiian and Part-Hawaiian group.

3. The death rate from cancer of the stomach in Hawaiian and Part-Hawaiian women is higher than in any other group of women. It is higher than the average for women of all races, and it is more than twice the rate for Caucasian women, but it is only slightly higher than the rate for Japanese women.

TABLE IV—DISTRIBUTION OF CASES OF CANCER AND AVERAGE POPULATION BY RACE AND SEX, TERRITORY OF HAWAII, 1944-1952

	Cancer Cases		Average Population*	
	Number	Per Cent	Number	Per Cent
Japanese	1,192	36.6	183,233	38.8
Caucasian	964	29.6	90,197	19.1
Hawaiian and Part-Hawaiian	447	13.7	84,375	17.9
Chinese	285	8.8	33,144	7.0
Filipino	192	5.9	60,315	12.8
Other**	177	5.4	21,027	4.4
Total	3,257	100.0	472,291	100.0

\* From population estimates by Bureau of Health Statistics, Honolulu, Hawaii, 1944-1952.

\*\* Includes Puerto Rican, Korean, Negro, Samoan, Indian.

Other workers such as Rhea,<sup>1</sup> Strode,<sup>2</sup> Steiner,<sup>3</sup> and McClanahan<sup>4</sup> have pointed out that Japanese men have more cancer of the stomach than men of other racial groups. Our figures agree in essence with the reports of these workers.

4. When we look at the death rates from cancer of the breast, we find that Hawaiian and Part-Hawaiian women have a death rate of 31.5 per 100,000 population as compared with that for all races which is 12.5; and this might be compared with the Caucasian rate which is 16.7; and most significantly, the rate of 3.5 in Japanese women. This will be discussed at some length later.

*Morbidity Study:* Since we are well aware of the weaknesses of mortality data, we have made a morbidity study of cancer through hospital records, which we feel is quite accurate. This study now includes 3,257 cancer cases. Each case accepted in this study has been checked by a competent medical doctor for accuracy of diagnosis. Eighty-eight per cent of the cases have histologic verification of the diagnosis made. The racial distribution of cases in this study is shown in Table IV. It is especially interesting to compare the percentage of each racial group in the total population with the per cent of the cancer cases in the particular racial groups. It can be concluded from this table that the *Chinese, Caucasian and other groups* have more than their share of cancers. It can be said further that the *Japanese, Hawaiian and Part-*

TABLE V—INCIDENCE RATES PER 100,000 POPULATION FOR CANCER OF THE STOMACH AND BREAST, BY SEX AND RACE, TERRITORY OF HAWAII, 1944-1952

Race	Stomach			Breast
	Both Sexes	Male	Female	Female Only
All Races	13.3	17.8	8.4	14.3
Hawaiian and Part-Hawaiian	8.6	9.6	7.7	11.5
Caucasian	11.0	16.6	6.4	33.5
Chinese	8.4	11.4	5.5	18.2
Japanese	20.7	29.1	12.1	7.1
Filipino	1.8	2.3	.6	2.4
Other*	17.6	28.2	4.3	8.6

\* Puerto Rican, Korean, Negro, Samoan, Indian, etc.

*Hawaiian*, and *Filipino* groups do not have their share of the cancers.

From the data collected in the morbidity study, incidence rates by race and sex for cancer of the stomach and breast have been computed. These will be found in Table V. It will be noted in this table that Japanese men have a higher incidence of cancer of the stomach than any other group, and Caucasian women have a higher incidence of cancer of the breast than any other group, while Japanese women and Filipino women have lower incidence rates from cancer of the breast than any other racial groups. There were 565 cancer of the stomach cases and 289 cases of cancer of the breast in this study.

*Epidemiological Studies:* As stated above, both our mortality and morbidity studies have shown that cancer of the stomach is more prevalent in Japanese men than in any other racial group in Hawaii. Our studies have also shown that cancer of the breast is more frequent in Chinese, Hawaiian and Part-Hawaiian, and Caucasian women and less frequent in Japanese and Filipino women than in any other racial groups in Hawaii.

We are now working on definite plans for epidemiological studies of cancer of the stomach in Japanese men. These studies may include investigation of such factors as dietary habits, preparation of food, temperature of food when eaten (whether the men are served before the women), alcohol consumption (particularly sake consumption), and



many others. We should produce information which will be of international value in the search for the causes of cancer of the stomach. I am sure Dr. James Ewing would have been greatly interested in these studies as shown by the following quotation from *Neoplastic Diseases*, page 684 of the 4th Edition: "Stevenson analyzing English statistics observes that cancer of the alimentary tract from mouth to stomach increases as the social status of the population declines. Cramer concludes that these data prove that the causes of these forms of cancer are extrinsic connected with the dietary habits of the people and, therefore, avoidable."

Another study which we are planning, based on the statistics referred to above, is concerned with the epidemiology of cancer of the breast. Dr. Ewing was greatly interested in this subject also as evidenced by the following quotation from page 560 to 561 in *Neoplastic Diseases*, 4th Edition: "Of 628 cases of Velpeau, Gross and Winiwarter, 441 had nursed children, 187 had not. Lehmann offers statistical evidence that nursing is a prophylactic against mammary cancer. Adair secured a normal lactation history in only 8 per cent of 200 cases of mammary cancer. In some cases the disease developed in one breast, which had not been nursed, owing to some disease of the nipple. Pregnancy is without definite influence. The influence of heredity is discussed under that topic." It can readily be seen from this quotation that Dr. Ewing believed normal lactation to be a prophylactic against mammary cancer.

Practicing physicians in Hawaii have observed for a number of years that Japanese women have a much lower incidence of cancer of the breast than other women in Hawaii. Tilden<sup>5</sup> wrote about this in 1938. It is believed that Japanese women and perhaps Filipino women in a higher percentage nurse their children through a full period of lactation than is true of other women in Hawaii. We are planning an epidemiological study to investigate possible reasons such as lactation to determine, if possible, why Japanese and perhaps Filipino women have a lower incidence of cancer of the breast than do other women in Hawaii. We believe this study should give information which will be of international value in the fight against cancer of the breast.

#### CANCER DETECTION

Our cancer control program in Hawaii has been based on making every private physician's office a cancer detection center. We have had

TABLE VI—HAWAII CANCER SOCIETY CYTOLOGY REPORT  
July 25, 1949, to March 31, 1954

Number of Patients .....	16,785
Number of Slides .....	32,798
Number of Doctors Participating .....	284
Number of Positive Cases .....	151
(Asymptomatic Uterine Cervix Cases) .....	35

no large detection centers. Because of the small area we cover and the closely-knit community of physicians, we have felt that our approach has been appropriate. We have endeavored to bring all of the latest diagnostic and treatment procedures to the private physician's office and assist in getting people to go to their private physicians for regular examinations for cancer, as well as for examinations when they may have symptoms suggestive of cancer. This latter part of the program has been brought about through lay education.

*What We Supply to Physicians:* Cytologic examinations on any body secretions, using the Papanicolaou technique, are made available to all practicing physicians in Hawaii through laboratories set up by the Hawaii Cancer Society. Any physician can prepare a slide from any body secretion and submit it to a laboratory for examination. Trained technicians stain and screen the slides and any which contain atypical cells are examined by a committee of specially trained physicians whose opinions are then transmitted to the referring physicians. The tests are performed without charge to patient or physician. All costs are underwritten by the Hawaii Cancer Society.

In Table VI will be found a summary of the cytologic tests performed in the Hawaii Cancer Society laboratory in Honolulu between July 25, 1949, and March 31, 1954. It will be noted that 284 physicians out of a total of 429 in Hawaii submitted slides to the laboratory. This will be recognized as quite a high percentage of the total physicians practicing in the Territory. There has been a gradual increase in the number of physicians using the cytology service since its establishment in 1949. This is shown in Table VII by the increase in slides submitted each year.

It should be especially pointed out that thirty-five asymptomatic

TABLE VII—HAWAII CANCER SOCIETY CYTOLOGY REPORT

	<i>No. of Patients</i>	<i>No. of Slides</i>	<i>Total Positives</i>	<i>Respira- tory Positives</i>	<i>Vaginal Positives</i>	<i>Asympto- matic Vag. Positives</i>
July 25, 1949- Aug. 31, 1949	123	228	5	0	5	1
Sept. 1, 1949- Aug. 31, 1950	2,348	4,155	32	5	16	7
Sept. 1, 1950- Aug. 31, 1951	2,701	5,617	34	8	21	5
Sept. 1, 1951- Aug. 31, 1952	3,809	7,007	28	8	15	5
Sept. 1, 1952- Aug. 31, 1953	4,721	8,698	28	2	20	12
*Sept. 1, 1953- March 31, 1954	3,083	7,093	24	3	16	5
	16,785	32,798	151	26	93	35

\* Represents an incomplete year of 7 months.

carcinomas of the cervix uteri have been picked up by the cytologic technique. These cancers were not suspected by either the patient or physician at the time the cytologic test was taken. The tests were performed as part of general cancer detection examinations. Of course, the chance of cure for these thirty-five cases is excellent. I believe we have shown that cancer of the cervix can be picked up earlier through the use of the cytological technique than by any other means. Certainly biopsies on these thirty-five unsuspected cases would have been impractical and probably would not have been done because there was no indication for them in the minds of the examining physicians. It was difficult to get positive biopsies on some of these asymptomatic cases, even after several very suspicious cytologic tests. One of the cases required eight biopsies before the cancer was found. Most of these thirty-five cases have been intraepithelial or carcinomas in situ. I believe Dr. Ewing<sup>6</sup> would have been greatly interested in these very early carcinomas of the cervix as evidenced by his writings on this subject.

I believe our physicians in Hawaii have been stimulated to think much more about early cancer of the cervix through the cytologic service which we have offered than they would have been inclined to do

TABLE VIII—HAWAII CANCER SOCIETY CYTOLOGY REPORT  
POSITIVE CASES

July 25, 1949, to March 31, 1954

Ascitic Fluid .....	3
Breast Secretion .....	2
Bronchoscopy .....	3
Gastric .....	5
Mouth .....	2
Nasal .....	1
Pleural Fluid .....	4
Prostatic .....	—
Sputum .....	26
Urinary .....	3
Uterine Cervix .....	93
Miscellaneous .....	9
	151

otherwise, and thus they are diagnosing cervical cancer earlier than ever before. This should result in a reduction in the death rate from this type of cancer.

We have, of course, applied the cytologic technique to other types of cancer, especially those of the pulmonary system. We have endeavored to get examinations of bronchial secretions and sputum in every case of suspected cancer of the lung; and although our results are not so spectacular in the early diagnosis of cancer of the lung as they are in cancer of the cervix, we feel that we are making a contribution to the early diagnosis and treatment of this type of disease through the cytologic examination.

We have endeavored to apply the cytologic technique to gastric secretions also. Thus far our efforts have not been rewarded by a great degree of success.

In Table VIII will be found a summary by site of the 151 cases of cancer found in the 16,785 persons who had cytologic tests during the period covered by this report. The ninety-three uterine cervix cases recorded here included the thirty-five asymptomatic cases reported in Table VI. One of the breast cases is especially interesting since there was no palpable lump at the time the secretion was found to contain cancer cells.

It should be made clear that we consider the cytologic test only a screening mechanism and should always be confirmed by a biopsy if possible before treatment is instituted. The cytologic test has undoubtedly contributed materially to the early detection of cancer in Hawaii. This is especially true of cancer of the uterine cervix.

In addition to the cytologic service, a biopsy service is offered to all persons who cannot afford to pay for this procedure. The biopsy specimens are usually examined without charge by the practicing pathologists in Honolulu. However, when necessary or desirable, funds are available to pay for this service.

*Consultation:* Since we have a good supply of well-trained and experienced medical and surgical specialists in Hawaii, there is no shortage of consultants on a private basis. Consultation is offered free of charge to all practicing physicians through the tumor clinics which are held in the main hospitals in Honolulu. These are staffed by specialists who work on a voluntary basis.

#### TREATMENT

Most of the radium in Hawaii is owned by the Territorial Health Department. This is supplied to all practicing physicians for the treatment of cancer at a fixed rate. No charge is made for the treatment of indigent or medically indigent persons. X-ray therapy or any other type of medical care for cancer is supplied free to indigent or medically indigent persons throughout the Territory.

#### CANCER PREVENTION

As in most communities, we have been able to do very little in cancer prevention. However, I will report briefly on the few concrete things that have been done in Hawaii.

1. Education of the dentists on how cancer can be prevented through good oral hygiene has been carried on in some degree.
2. We are convinced that poor nutrition may be a very important etiologic agent in cancer of the oral cavity and in primary cancer of the liver. We are endeavoring as much as possible to prevent these cancers through nutrition educational programs.
3. We believe industrial poisons may play a part in causing primary cancer of the liver (with poor nutrition). The role of industrial poisons in the production of cancer in the pulmonary system and of the skin

has been studied. We are endeavoring to prevent these cancers through good industrial hygiene programs.

4. As a possible preventive of uterine cervical cancer, we have urged, through educational programs, that medical attention be given to cervical erosions and lacerations.

#### SUMMARY AND CONCLUSIONS

1. Cancer is an important community health problem in Hawaii as it is in many parts of the world today. The problem in Hawaii has increased as the population has aged and communicable diseases have been eliminated or brought under control.

2. Lay education directed toward getting every person to have regular physical examinations and report to his private physician at the earliest sign which might mean cancer has been emphasized. This should produce definite results in reducing cancer deaths. This program has caused the average lay person to be cancer-conscious and anxious to see a physician as soon as possible after symptoms which may mean cancer develop. The opposite reaction, i.e., fear of seeing a physician, has been encountered rarely. Professional education of physicians and dentists has also been emphasized.

3. Statistical studies have been made to determine the areas where most emphasis should be placed in controlling cancer in Hawaii. Epidemiological studies are being planned in attacking cancer of the stomach, which is more frequent in Japanese men in Hawaii than in other racial groups. Cancer of the breast is more frequent in Caucasian women than in other women in Hawaii. Epidemiological studies of this type of cancer are also being planned. We hope we can attract grants-in-aid from national or international organizations in order to make our epidemiological studies of cancer of the stomach and breast. We believe the data we will turn up will be of international interest.

4. The philosophy of making every private physician's office a cancer detection center has been emphasized. We have supplied to the physicians cancer detection and diagnostic aids through cytologic tests and biopsies. Consultation and the best methods of treatment are available.

5. Cancer prevention programs have been directed principally towards oral, hepatic, pulmonary, skin, and uterine cervical neoplasms. Good nutrition, avoidance of poisons, and removal of chronic irritations have been emphasized.

Through the epidemiological studies which we have planned on cancer of the stomach and the breast, we should be able to gather data on cancer prevention. I am sure this matter of cancer prevention is entirely in accord with the philosophy of Dr. James Ewing as revealed by the following quotation from his writings:<sup>7</sup> "So it seems to be a royal summons, this call to join the heroes and martyrs of history. It is a good deal that they are deemed worthy of the call. The great majority of natural deaths are *preventable*, if we would go back and do the right things at the right time. They are none the less inevitable with our human foresight. Don't entertain any doubts of this fact. We do the best we can at the time and the right choice is our good fortune, while failure is absolutely beyond our control."

6. I must tell you again how greatly honored I feel in being invited to give this Annual James Ewing Memorial Lecture on Cancer, and I would like to express my appreciation, especially to Dr. Elise L'Esperance and the members of her committee who extended the invitation to me. As a final tribute to Dr. Ewing, I will quote from the presentation of Dr. L'Esperance<sup>7</sup> before the Section on Historical and Cultural Medicine of The New York Academy of Medicine, on November 9, 1949, in which she said: "The influence of his life, its human understanding and high ideals have left their imprint on all who knew him. His life work has given to American medicine an inspiration in cancer research that has established on a firm foundation the broad vision of cancer control today. There exist in every age masterful men who are masterful because they see with clear vision the course of events and fearlessly act upon the forecast. We wonder and cannot explain why these souls of rare genius have no successor of equal powers."

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